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10/719,955	11/21/2003	Tsutomu Taniguchi	60256 (70904)	3521

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EXAMINER	
ROBINSON, MYLES D	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/719,955	TANIGUCHI ET AL.	
	Examiner	Art Unit	
	Myles D. Robinson	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 -20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 November 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/21/2003, 5/20/2005, 8/17/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The examiner has considered the references listed in the Information Disclosure Statements (IDS) submitted on 11/21/2003, 5/20/2005 and 8/17/2006 (see attached PTO-1449).

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: references to (a) HEADER, (c) ATTACHMENT, REQUEST FOR MDN, ADDRESS FOR MDN, MAIL IDENTIFICATION (Fig. 3), reference character S24 (Fig. 8) .

4. Figure 10 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct

any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

6. ***Claims 4, 10 and 17*** are objected to under 37 CFR 1.75 as being a substantial duplicate of claim 1, 7 and 13, respectively. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k) and 35 U.S.C. 112, fourth paragraph, wherein the dependent claims 1, 7 and 13 fail to substantially specify a further limitation of the subject matter claimed.

7. The following quotation of 37 CFR 1.75(a) is the basis of the objection:

> (a) The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.

8. ***Claims 4, 10, 14 and 17*** are objected to under 37 CFR 1.75(a) as failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention or discovery.

Claims 4, 10 and 17 recite the limitations “a request... for a response,” “a data transmission" and “a receiving-end machine” in lines 4 – 5 of these claims after the limitations “a request for a response,” “a data transmission" and a receiving-end machine" were claimed in the respective parent claims 1, 7 and 13. The applicant has failed to particularly point out and distinctly claim if the applicant is referring to ***the same, instant*** “request for a response,” “data transmission" and “receiving-end machine” or ***a unique and distinctly different*** “request for a response,” “data transmission" and “receiving-end machine” within the claim.

9. **Claim 14** recites the limitation “a network” in line 4 of the claim after the limitation “a network” was claimed in line 2 of the parent claim 13. The applicant has failed to particularly point out and distinctly claim if the applicant is referring to ***the same, instant*** “network” or ***a unique and distinctly different*** “network” within the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. ***Claims 5, 6, 11, 12 and 18 – 20*** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Furthermore, the Applicant regards the “computer-readable recording medium on which is recorded a program” within **claims 5, 6, 11, 12 and 18 – 20** alternatively as a

transient medium, a carrier wave and/or a signal (*see Specification [page 36, line 25 – page 37, line 2]*). Transient media, carrier waves and signals, considered in the forms of electrical, optical, microwave, radio frequency, etc., are all categorized under non-statutory subject matter of natural phenomenon. Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are non-statutory natural phenomena. *O'Reilly v. Morse*, 56 U.S. (15How.) 62, 112-14 (1853). Moreover, it does not appear that a claim reciting a signal encoded with functional material descriptive material falls within any of the categories of patentable subject matter set forth in § 101.

First, a claimed signal is clearly not a "process" under § 101 because it is not a series of steps. The other three § 101 classes of machine, compositions of matter and manufactures "relate to structural entities and can be grouped as 'product' claims in order to contrast them with process claims." 1 D. Chisum, Patents § 1.02 (1994). The three product classes have traditionally required physical structure or material.

"The term machine includes every mechanical device or combination of mechanical device or combination of mechanical powers and devices to perform some function and produce a certain effect or result." Corning v. Burden, 56 U.S. (15 How.) 252, 267 (1854). A modern definition of machine would no doubt include electronic devices which perform functions. Indeed, devices such as flip-flops and computers are referred to in computer science as sequential machines. ***A claimed signal has no***

physical structure, does not itself perform any useful, concrete and tangible result and, thus, does not fit within the definition of a machine.

A "composition of matter" "covers all compositions of two or more substances and includes all composite articles, whether they be results of chemical union, or of mechanical mixture, or whether they be gases, fluids, powders or solids." Shell Development Co. v. Watson, 149 F. Supp. 279, 280, 113 USPQ 265, 266 (D.D.C. 1957), aff'd, 252 F. 2d 861, 116 USPQ 428 (D.C. Cir. 1958). ***A claimed signal is not matter, but a form of energy, and therefore is not a composition of matter.***

The Supreme Court has read the term "manufacture" in accordance with its dictionary definition to mean "the production of articles for use from raw or prepared materials by giving to these materials new forms, qualities, properties, or combinations, whether by hand-labor or by machinery." Diamond v. Chakrabarty, 447 U.S. 303, 308, 206 USPQ 193, 196-97 (1980) (quoting American Fruit Growers, Inc. v. Brogdex Co., 283 U.S. 1, 11, 8 USPQ 131, 133 (1931), which, in turn, quotes the Century Dictionary). Other courts have applied similar definitions. See American Disapperating Bed Co. v. Arnaelsteen, 182 F. 324, 325 (9th Cir. 1910), cert. Denied, 220 U.S. 622 (1911). These definitions require physical substance, which a claimed signal does not have. Congress can be presumed to be aware of an administrative or judicial interpretation of a statue and to adopt that interpretation when it re-enacts a statute without change. Lorillard v. Pons, 434 U.S. 575, 580 (1978). Thus, Congress must be presumed to have been aware of the interpretation of manufacture in American Fruit Growers when it passed the 1952 Patent Act.

A manufacture is also defined as the residual class of product 1 Chisum, § 1.02[3] (citing W. Robinson, The Law of Patents for Useful Inventions 270 (1890)). A product is a tangible physical article or object, some form of matter, which a signal is not. That the other two product classes, machine and composition of matter, require physical matter is evidence that a manufacture was also intended to require physical matter. ***A signal, a form of energy, does not fall within either of the two definitions of manufacture.*** Thus, a signal does not fall within one of the four statutory classes of § 101.

On the other hand, from a technological standpoint, a signal encoded with functional descriptive material is similar to a computer-readable memory encoded with functional descriptive material, in that they both create a functional interrelationship with a computer. In other words, a computer is able to execute the encoded functions, regardless of whether the format is a disk or a signal.

Regarding claims 5, 6, 11, 12 and 18 – 20, it is suggested that the Applicant consider amending "computer readable medium" to read "tangible computer readable medium" in order to make the claim statutory. *In re Warmerdam*, 33 F.3d 1354, 31 USPQ 2d 1754 (Fed. Cir. 1994).

12. **Claims 5, 11 and 18** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 5, 11 and 18 are drawn to functional descriptive material NOT claimed as residing on a computer readable medium. See MPEP 2106.01 (Functional Descriptive Material) which states:

> "Data structures not claimed as embodied in a computer-readable medium are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer."
>
> "Such claimed data structures do not define any structural or functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structures' functionality to be realized."

Claims 5, 11 and 18, while defining a program, does not define a "computer-readable medium" and is thus non-statutory for that reason. A program can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on "computer-readable medium" in order to make the claim statutory.

> "In contrast, a claimed computer-readable medium encoded with the data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory." – MPEP 2106.IV.B.1(a)

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14. ***Claims 1 – 20*** are rejected under 35 U.S.C. 102(e) and under 35 U.S.C. 102(a) as being anticipated by **Yao *et al.*** (U.S. Pre-Grant Publication NO. 2003/0187937).

Referring to **claims 7 and 10**, Yao discloses a communications device (*see Fig. 3 wherein e-mail client A is installed and runs on a computer, which is not shown [paragraph 0017]*), comprising:

transmission/receipt means (*see Fig. 3, e-mail client A*) for transmitting/receiving data over a network (*paragraph 0002 wherein e-mail communication via various networks is well-known in the art*),

response request embedding means for embedding a response request for a response to a data transmission from a receiving-end machine in transmitted data (*paragraph 0020 wherein an electronic message sent from e-mail client A to a recipient's e-mail address analogous to a request for a response from a receiving-end machine, especially if the response from a receiving-end machine [e.g. recipient's e-mail address] includes the term "Re:" in the subject line*),

data identifying means (*see Fig. 3, e-mail attribute fuzzy rules 32 [paragraph 0019]*) for determining whether data to be received over the network is response data to the response request (*see Fig. 1 wherein e-mail client A receives an incoming e-mail in step 10 [paragraph 0017] and then applies rules 32 to each e-mail as it is received, or alternatively they may be applied at some later time [paragraph 0018]*)

receipt control means (*see Fig. 3, e-mail attribute rules 32, neural network 30 [paragraph 0027]*) for controlling the transmission/receipt means so as to preferentially receive data (*see Fig. 1 wherein each e-mail is assigned an importance rating in step 12 [paragraphs 0007, 0008 and 0021] and then sorts received e-mails into folder tabs 22 ranking their respective level of importance [e.g. High, Medium, Low as shown in Fig. 2]*

based upon the characteristics and attributes defined in rules 32 in step 13 [paragraphs 0022 – 0024]) identified as the response data by the data identifying means over other data (*paragraph 0020 wherein rules 32 could indicate e-mails with the term "Re:" in the subject line as a higher importance than e-mails without the term "Re:" in the subject line [i.e. given more preferential weight than those e-mails of lower importance] insomuch as the "Re:" indicates the e-mail is a response to a previous e-mail sent [i.e. response data]*).

Referring **claim 8**, Yao discloses the device further wherein the data identifying means determines whether data to be received is the response data by comparing a size of the data to be received to a predetermined data size (*paragraphs 0010 and 0020 wherein the length or size of the message or parts thereof and the presence and/or size of attachments are attributes which could be used to determine an e-mail's level of importance as shown in Fig. 2 and see paragraphs 0019 – 0020 and 0027 – 0028 wherein neural network 30 is preferably regulates the specific form of each membership function associated with the e-mail rules 32 applied to received e-mail optionally as a combination of fuzzy and crisp rules [e.g. a combination of rules regarding the size of a received e-mail and whether the subject line of the received e-mail contains the term "Re:"]*).

Referring to **claim 9**, Yao discloses the device further comprising:

storage means for storing received data (*see Fig. 2 wherein received e-mails are stored within tabs 22 [paragraphs 0022 – 0025]*), and

storage control means (*see Fig. 3 wherein user actions 34 define user action fuzzy rules 36 such that over a number of iterations, the neural network 30 then adjust e-mail attribute rules 32 based upon monitored user actions 34 [paragraphs 0029 and 0033]*) for controlling storing to the storage means so that after storing the received data, the storage means is left with empty space needed to store the response data (*paragraphs 0011, 0029 and 0033 wherein one of the monitored user actions 34 is the storage and deletion of e-mails such that e-mails frequently deleted [e.g. lower IR] will be managed to make more room for received e-mails to e-mail client A*).

Referring to **claims 13 and 17**, Yao discloses a communications device (*see Fig. 3 wherein e-mail client A is installed and runs on a computer, which is not shown [paragraph 0017]*) transmitting/receiving data over a network (*paragraph 0002 wherein e-mail communication via various networks is well-known in the art*) and making a request for a response to a data transmission from a receiving-end machine (*paragraph 0020 wherein an electronic message sent from e-mail client A to a recipient's e-mail address analogous to a request for a response from a receiving-end machine, especially if the response from a receiving-end machine [e.g. recipient's e-mail address] includes the term "Re:" in the subject line*), said device comprising:

data identifying means (*see Fig. 3, e-mail attribute fuzzy rules 32 [paragraph 0019]*) for determining whether data to be received over the network is response data to the response request (*see Fig. 1 wherein e-mail client A receives an incoming e-mail in step 10 [paragraph 0017] and then applies rules 32 to each e-mail as it is received, or alternatively they may be applied at some later time [paragraph 0018]*), and

receipt control means (*see Fig. 3, e-mail attribute rules 32, neural network 30 [paragraph 0027]*) for ranking, concerning receiving of data (*see Fig. 1 wherein each e-mail is assigned an importance rating in step 12 [paragraphs 0007, 0008 and 0021] and then sorts received e-mails into folder tabs 22 ranking their respective level of importance [e.g. High, Medium, Low as shown in Fig. 2] based upon the characteristics and attributes defined in rules 32 in step 13 [paragraphs 0022 – 0024]*), data identified as the response data by the data identifying means higher than other data (*paragraph 0020 wherein rules 32 could indicate e-mails with the term "Re:" in the subject line as a higher importance than e-mails without the term "Re:" in the subject line insomuch as the "Re:" indicates the e-mail is a response to a previous e-mail sent [i.e. response data]*).

Referring to **claim 14**, Yao discloses the device further wherein:

the communications device transmits/receives data through a network and a relay device (*paragraph 0002 wherein an e-mail network comprised of numerous clients and servers relaying e-mail between recipients and senders of respective addresses is well-known in the art*), the relay device receiving and storing data addressed to the communications device over the network and for assigning identity information and a serial number to each of stored data sets (*paragraph 0002 wherein an e-mail network comprised of servers storing messages until an e-mail client accesses the electronic mailbox is well-known in the art and paragraph 0020 wherein received e-mail is identified by various parameters [e.g. name of sender, size of message, whether attachments are present, addressing information, subject line information, whether the*

message is a reply or forwarded message, etc.] such that one other identifying parameter is time and/or date the e-mail was sent, which is analogous to identification based upon serial numbers such that a time/date stamp identifies a specific moment over a continuous period of time), the stored data sets being renumbered where necessary so that they are serially numbered (*see Fig. 2 wherein the e-mails are sorted into chronological order within any folder 22 [e.g. ascending or descending] [paragraph 0025]*), and

when data is to be received from the relay device, the receipt control means changes a data receiving ranking by way of a request to the relay device from a ranking indicated by the serial numbers (*see Fig. 1 wherein each e-mail is assigned an importance rating in step 12 [paragraphs 0007, 0008 and 0021] and then sorts received e-mails into folder tabs 22 ranking their respective level of importance [e.g. High, Medium, Low as shown in Fig. 2] based upon the characteristics and attributes defined in rules 32 in step 13 [paragraphs 0022 – 0024]*).

Referring to **claims 11 and 12**, the rationale provided in rejection of claim 7 is incorporated herein. The device of claim 7 performs the programs of instructions of claims 11 and 12 stored within memory and executed by a series of processors (*see Fig. 3 wherein e-mail client A is installed and runs on a computer, which is not shown [paragraph 0017]*).

Referring **claims 15 and 16**, the rationale provided in the rejections of claims 8 and 9, respectively, are incorporated herein. In addition, the devices of claims 8 and 9 include the limitations and elements of the devices of claims 15 and 16, respectively.

Referring to **claims 18 and 19**, the rationale provided in rejection of claim 13 is incorporated herein. The device of claim 13 performs the programs of instructions of claims 18 and 19 stored within memory and executed by a series of processors (*see Fig. 3 wherein e-mail client A is installed and runs on a computer, which is not shown [paragraph 0017]*).

Referring to **claims 1 – 4**, the rationale provided in the rejections of claims 7 – 10, respectively, are incorporated herein. In addition, the devices of claims 7 – 10 include the limitations and elements of the devices of claims 1 – 4, respectively.

Referring to **claims 5 and 6**, the rationale provided in rejection of claim 1 is incorporated herein. The device of claim 1 performs the programs of instructions of claims 5 and 6 stored within memory and executed by a series of processors (*see Fig. 3 wherein e-mail client A is installed and runs on a computer, which is not shown [paragraph 0017]*).

Referring to **claim 20**, the rationale provided in the rejection of claim 1 is incorporated herein. In addition, the device of claim 1 performs the method of claim 20.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Broughton *et al.* (U.S. Patent No. 7,254,641) disclose a digital multimedia contact center with tier escalation and de-escalation in response to changed criteria (*see Abstract and Figs. 1 – 2 and 3B*).

Okachi (U.S. Patent No. 7,185,108) discloses an information processing apparatus for replying to an inquiry from a customer in accordance with a reply priority (*see Abstract and Figs. 3 – 5*).

Farrell *et al.* (U.S. Patent No. 5,245,368) disclose a system for permitting a higher priority job to interrupt a currently printing job in order to be printed non-sequentially (*see Abstract and Fig. 8D*).

Nomura *et al.* (U.S. Patent No. 5,327,526) disclose a print job control system setting an order of priority for printing print jobs such that a print job manager checks the print job request and manipulates the queue identifiers associated with respective print jobs and enters them into a print queue table wherein one feature allows for the changing of the print order (*see Abstract and Figs. 1 – 9*).

Tanimoto (U.S. Patent No. 7,180,637) discloses a method of operating facsimile machines wherein a priority table is stored that specifies printing priorities for different types of designated information such that printing of associated image data is then controlled based on relative priority of one designated information detected with respect to another designation detected (*see Abstract and Figs. 1 – 4*).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myles D. Robinson whose telephone number is (571)272-5944. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler L. Haskins can be reached on (571) 272-7406. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Myles D Robinson/
Examiner, Art Unit 2625
3/5/08

/Twyler L. Haskins/
Supervisory Patent Examiner, Art Unit 2625
3/11/08